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REPORT NO. [REDACTED] 50X1

COUNTRY Austria (Soviet Zone)

DATE DISTR. 10 Feb. 1955

SUBJECT 1. Radar Posts of the 135th Separate Air Warning Battalion
2. Other Radar Locations in Austria

NO. OF PAGES 19 50X1

DATE OF INFORMATION [REDACTED] REFERENCES: 50X1

PLACE ACQUIRED [REDACTED] 50X1

THIS IS UNEVALUATED INFORMATION

Radar Posts of the 135th Separate Air Warning Battalion

1. The 135th Separate Air Warning Battalion operated three radar posts in Austria; one at Hellmonsoedt (N 48-26, E 14-18) which carried the number 401 or 402, one at Stegersbach (N 47-10, E 16-10) which carried the number 401 or 402, and one at St. Poelten (N 48-12, E 15-38).¹

Hellmonsoedt

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[REDACTED] a soldier who had just arrived in Blumau to work in the Technical Platoon at 135th Separate Air Warning Battalion Headquarters. This soldier had previously been stationed at the battalion's radar post at Hellmonsoedt and showed [REDACTED] a photograph, taken in 1952, which pictured a group of Soviet troops around a radar set which was mounted on a GAZ-63 truck. The radar type shown in the photograph was familiar [REDACTED]. This same soldier told [REDACTED] that in May 1952 personnel who manned the Hellmonsoedt radar post entrained for Moscow and returned with a Pereskop (Token) radar set. [REDACTED] since it was customary to transport technical equipment by rail, [REDACTED] this Pereskop was brought to Austria by rail rather than by truck.

Pereskop Radar at Hellmonsoedt Post

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[REDACTED] a radar repairman from the maintenance team (KRAS) of Headquarters, 135th Separate Air Warning Battalion in Blumau that the Pereskop radar set at Hellmonsoedt had six lobes and a radius of action of 400 km. [REDACTED] should the Pereskop operator doubt that a target in his scope

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is moving, he can cut out the lobes which are focused on the stationary target and apply his other lobes until he locates the target. The operator himself must determine whether or not the target is moving. Source had never heard any rumors or conversations about provisions for any radar to lock onto a moving target and to ignore relatively stationary ones.

Stegersbach

4. [] never visited the radar post at Stegersbach but learned about various aspects of it from hearsay. According to rumor, a radar unit had been posted at Landsee (N 47-33, E 16-20). This unit had a mobile Dumbo radar set until May 1954, at which time a Pereskop was moved in and the Dumbo set was given to an anti-aircraft artillery unit. (See page 6 for [] sketch of Dumbo radar.) At the time the Pereskop radar was brought to Landsee, it was decided that there was too much ground clutter at this location and the unit was moved to Blumau and then posted at Stegersbach.

Pereskop Radar Destined for Stegersbach

5. [] unloading from a platform car this Pereskop radar which eventually was located at Stegersbach. This Pereskop was brought from Hungary [] to the 135th Air Warning Battalion in Blumau. The Pereskop booth, uncovered, was loaded on one flat car, the Pereskops antennae on another.² Four or five pieces of antenna were bolted on a special two-wheel trailer, lying on edge side by side and covered with tarpaulin. (See pages 7 and 8 for [] sketch of the trailer and antennae.) The booth was pulled off the flatcar by a tractor (tyagach).³ The two-wheel trailer with the antennae was pushed off by hand. The tractor was hitched to the front of the booth and the special two-wheel trailer was hooked to the back. This radar set was sent first to Landsee and later to Stegersbach. (See Paragraph 4 above.)
6. The Pereskop radar revolving booth was normally pulled by a ZIS-151 truck, and the two-wheel trailer was hooked to the back of the booth. Maximum speed was 60 km. per hour; average speed was 40 km. per hour. When this Pereskop set was moved to Stegersbach from Blumau, it was accompanied by the following vehicles:
- Booth pulled by ZIS-151 truck (See pages 9 and 10.)
 - Trailer with antennae, hooked behind booth. (See pages 7 and 9.)
 - Two ZIS-151 trucks with a metal cabin, windows on the left side, and door in the rear. []
 - One other 5-ton ZIS-151 truck with a large metal booth and another truck which resembled a U.S. 2½-ton truck. (See pages 13 and 14.)

It was general knowledge that one of the three ZIS-151 trucks with metal booths had a diesel motor generator. One truck had a control booth where the radar operators sat. [] no information on the number of personnel nor [] information on the use of the other trucks. []

[] A radar repairman told [] that no one sat in the revolving booth but that personnel sat in another booth off to the side.

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Operation of Pereskop Radar At Stegersbach

7. [redacted] a former Pere-
 50X1 skop operator from Stegersbach who had recently been transferred
 50X1 into [redacted] unit at Blumau. This operator's Pereskop worked 12
 50X1 hours daily; it was replaced for the following 12 hours by another
 set which the operator could not identify. To relieve his boredom
 while on guard duty, he would climb into the Pereskop booth and
 rotate at six rpm.
8. The Pereskop had three scopes, one directly above the other. The
 first or top one was for area scan (ekran krupnogo obzora), the
 second for sector scan, and the third for height finding. Ordinarily
 the Pereskop is used on area scan. At the appearance of a target,
 the radar is switched from area to sector scan. To determine height,
 50X1 the sector scan is switched off and the height finder or bottom
 50X1 scope is turned on.⁴ [redacted]
 50X1 (See page 15 for [redacted] sketch of the
 picture.) The operator said that he was highly pleased with the
 overall operation and performance of the Pereskop. It was very
 effective so long as the aircraft made no sudden changes in course
 and/or altitude; such changes made tracking very difficult if not
 impossible.
9. [redacted]
 50X1 [redacted]
 50X1 The Pereskop radar at Stegersbach had five lobes and a radius of
 50X1 of 400 km; it covered parts of West Germany and Italy. The operator
 50X1 told [redacted] that he and other operators considered it a much better
 set than the knife-rest radar, a type used at St. Poelten. (See
 page 16).
10. [redacted] there were only two Pereskop
 50X1 radar sets in the 135th Separate Air Warning Battalion: the one at
 Hellmonsoedt and the one at Stegersbach.

St. Poelten

11. [redacted] the 135th Separate Air Warning Battalion,
 50X1 was stationed at the battalion's radar post at St. Poelten [redacted]
 50X1 (See page 17 for pinpoint of approximate
 50X1 location of this post.) This radar post consisted of two officers
 and 25 soldiers, 19 of whom were either radio or radar operators,
 five of whom were drivers, and one of whom was a cook. The drivers
 had the additional duty of taking care of the two unit generators,
 one of which was in use and one in reserve. This radar post was
 50X1 equipped with a knife-rest radar.⁵ (See page 16 for [redacted]
 sketch.)
- 50X1 Knife-Rest Radar at St. Poelten
12. [redacted]
 50X1 [redacted] The knife-rest radar at St. Poelten emitted two lobes
 50X1 to provide greater coverage in locating a target. It had a range
 of 120 km and could detect any window thrown out by aircraft, but
 it was very difficult for the operator to differentiate between
 moving and non-moving objects. This radar was the object of much
 complaint on the part of the radar operators.
13. Each knife-rest radar was accompanied by two ZIS trucks with booths.
 One booth contained the radar scopes and control instruments; the
 other contained two 2-cylinder, gasoline driven generators, type
 L-3/6. The generators were ordinarily used to charge the batteries
 which furnished power for the radar antennae. When a target was

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50X1 Spotted, the generator was hitched into the power line. [redacted]
 50X1 called batteries, caustic or alkali, shcholak. The Cyrillic
 50X1 letters HKH were on each battery. [redacted] uncertain of the
 meaning of these initials but thought that they might stand for
Nakalno Kadmiy Nikel.

Parts Supply and Radar Maintenance in the 135th Air Warning Battalion

14. There were two warehouses in Blumau where new radio and radar equip-
 50X1 ment, such as, tubes, cables, etc., was stored. [redacted]
 50X1 supplies of tubes were adequate. Since it was customary to ship
 50X1 some spare parts along with technical equipment, [redacted]
 [redacted] small parts such as tubes came with the equipment.

15. Headquarters of the 135th Separate Air Warning Battalion at Blumau
 had a radar and radio repair team (KRAS - K [redacted] Remontnaya Avto
 Stantsiya) consisting of seven men: Sr. Lt. Kozlov (fnu), one
 junior sergeant, two drivers, and three soldiers. The team had
 two ZIS-151 trucks which were used to go out to radar posts to per-
 form maintenance work. One truck had mechanical repair facilities;
 the other had instruments for checking radar circuits. Both trucks
 had metal booths.

50X1 This mobile repair team went to Stegersbach three times from January
 to October 1954. A radar repairman told [redacted] about having to go
 50X1 to the Stegersbach radar post in order to repair an insulator which
 had been broken. Since there were no spare insulators available,
 they had to recement the old one. This repairman told [redacted] that
 8,000 volts went through the Pereskop transformer insulator.

Other Radar Locations In Austria

17. In addition to the radar posts of the 135th Separate Air Warning
 50X1 Battalion, [redacted] two other radar sets in
 the Soviet Zone of Austria.

Radar Near Rodaun

18. There was a knife-rest radar set in the vicinity of Rodaun. (See
 50X1 page 18 for pinpoint location.) [redacted] this set from
 a distance of 1,100 meters [redacted] when driving by in a ZIS-5
 50X1 truck. [redacted] At no time
 50X1 [redacted] notice any movement of the antennae. The set was located on
 the top of a hill, and the area surrounding it was level. Approxi-
 50X1 mately 20 meters west of the set was a small two-story stone house.
 There was also a ZIS-151 truck with a booth in the area. Several
 50X1 soldiers were also in the area, but [redacted] could not identify their
 parent service.

Radar Near Weiner Neustadt

19. There was another knife-rest radar set in the vicinity of Weiner
 50X1 Neustadt. (See page 19 for pinpoint location.) [redacted]
 50X1 [redacted] During this
 50X1 period, [redacted] drove by this area almost weekly and observed the set
 from a distance of approximately 500 meters. [redacted] the radar
 50X1 antennae and two car ports, one with a ZIS-151 with a booth parked
 in it. There was presumably another ZIS-151 with a booth in the
 50X1 other car port, but [redacted] could not see it since the car ports
 50X1 were back to back. [redacted] this type of radar
 50X1 needed two trucks, one with the radar scopes, etc. and the other
 50X1 for power generating equipment. [redacted] did not notice any movement of
 50X1 antennae. [redacted] several soldiers in uniform and a pet dog in
 50X1 the vicinity, but [redacted] could not identify their parent service.

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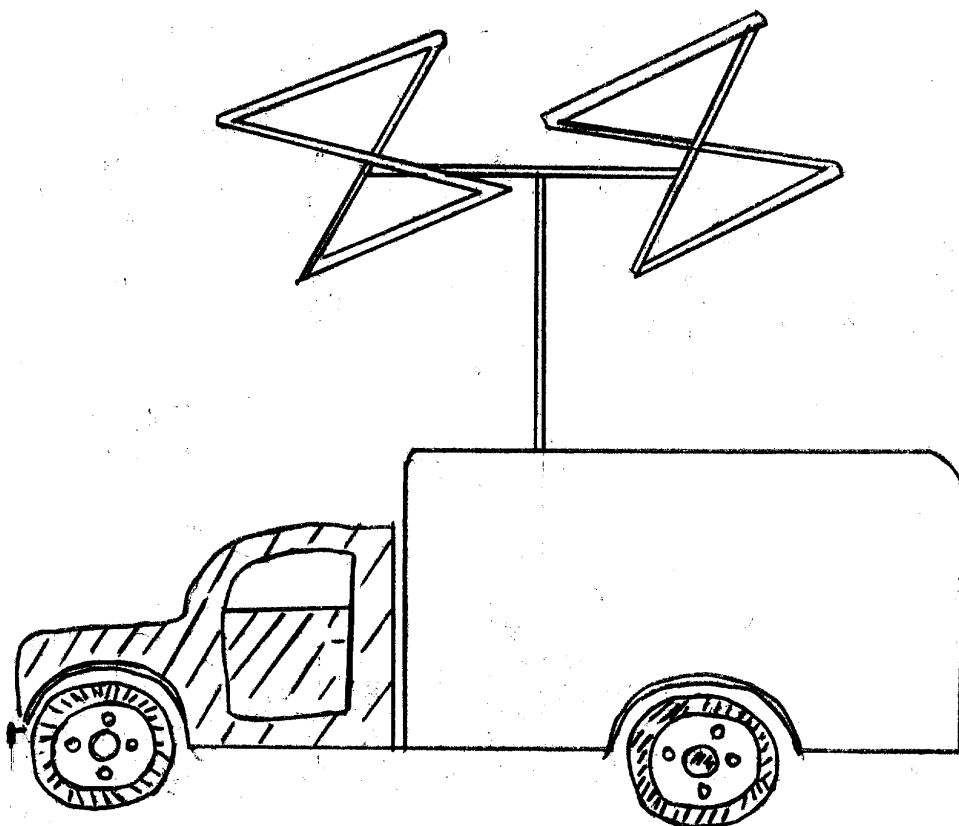
1. [REDACTED] 50X1
2. [REDACTED] Comment: [REDACTED] 50X1
[REDACTED] 50X1
[REDACTED] the Pereskop radar 50X1
booth was of the same general construction except for differences 50X1
shown in his sketches. [REDACTED] 50X1
[REDACTED] 50X1
3. [REDACTED] Comment: The tractor which pulled the Pereskop from the flat- 50X1
bed to the auto park was identified [REDACTED] as the track laying 50X1
vehicle shown pulling the 305 mm Howitzer M1940 on page 95, 50X1
Identification Handbook, Soviet Military Weapons and Equipment,
USAREUR, with a new diesel engine, two cycle, four cylinder, type 50X1
YaAZ 205 (?). [REDACTED] the engine was a 1946 model.
4. [REDACTED] Comment: When [REDACTED] the Pereskop operator, des- 50X1
cribed this set he mentioned three scopes and when he drew a 50X1
picture of the set he drew three rectangles to depict three scopes. 50X1
[REDACTED] could not state from this that there were only three scopes.
5. [REDACTED] Comment: [REDACTED] referred to all radar sets other than the 50X1
Pereskop as Lokator. This term included truck mounted antennae 50X1
as well as other types. [REDACTED] this was the usual method 50X1
of referring to them.

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Memory Sketch of Dumbo Mobile Radar Unit
at Hellmonsoedt. (See Para. 4 of text.)

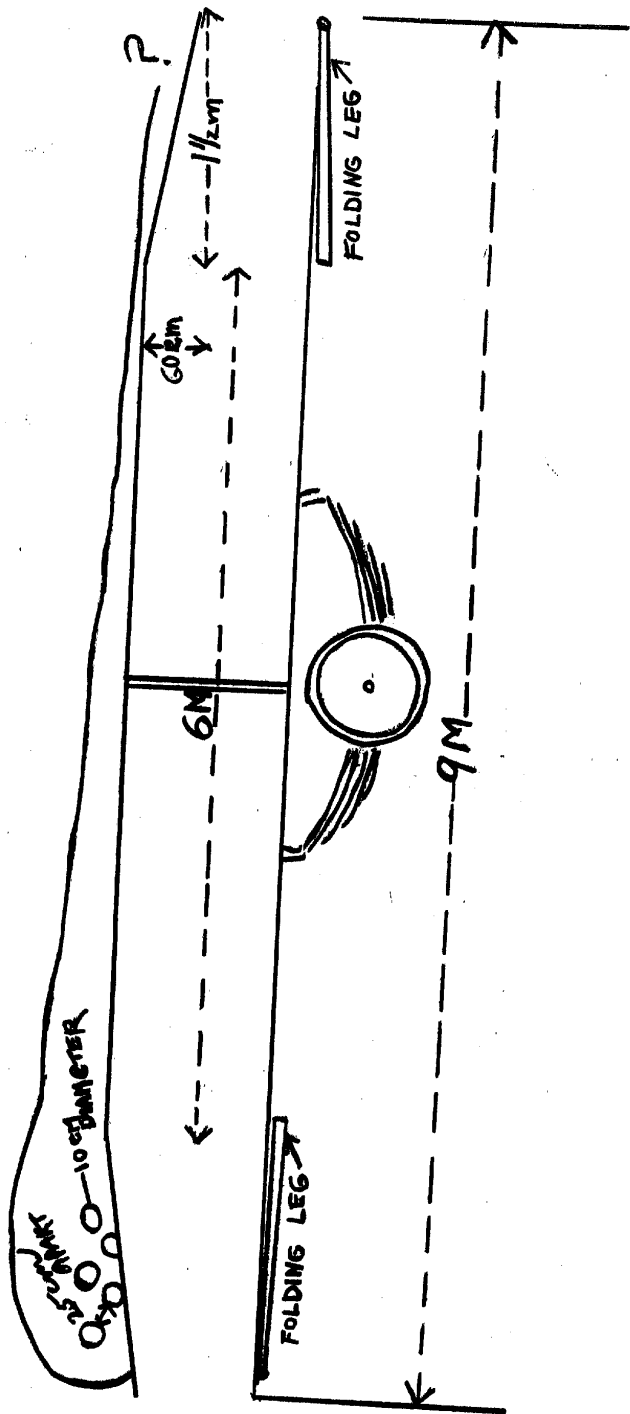


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Memory Sketch of Trailer
and Pereskop Antenna
(See Para. 5 of text)



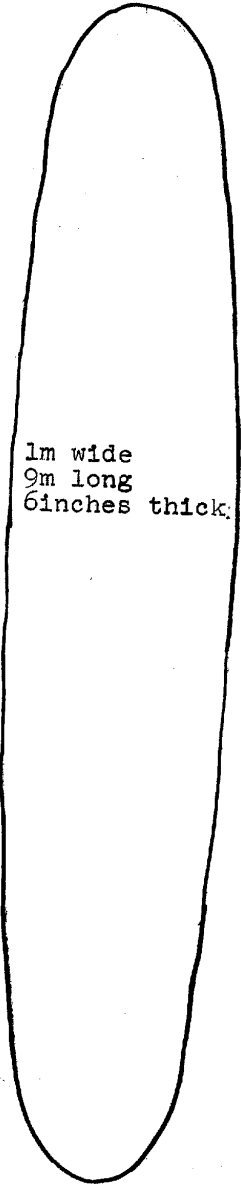
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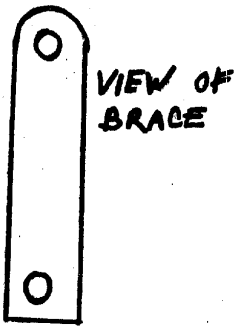
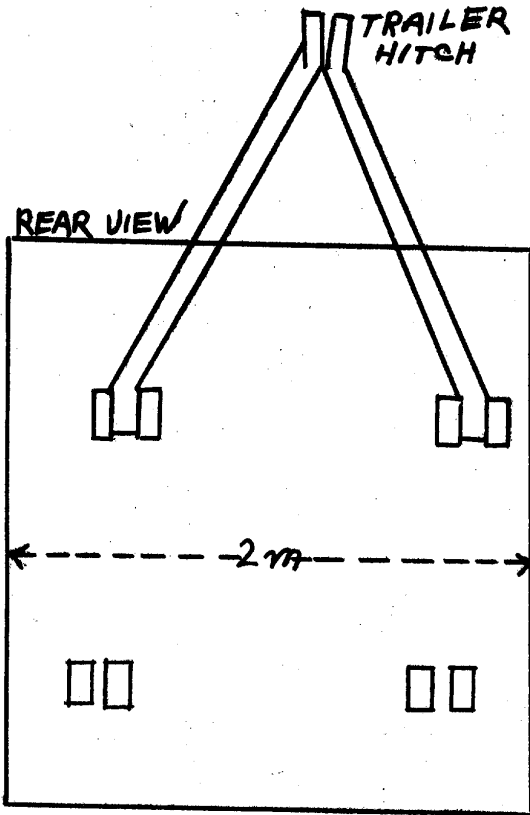
Antenna for the Pereskop
Radar (See Para. 5 of text)



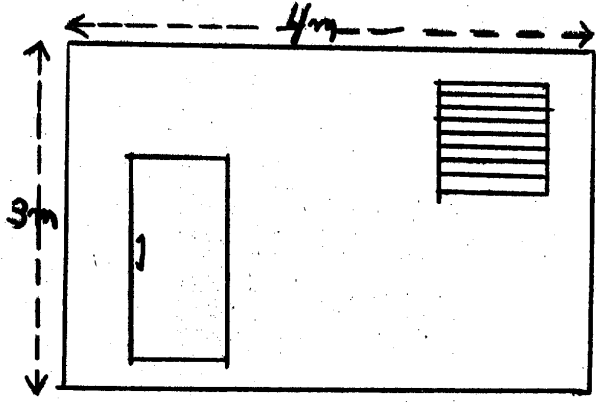
1m wide
9m long
6inches thick

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Booth which is pulled by truck. (See Para. 6 of text.)



SIDE VIEW

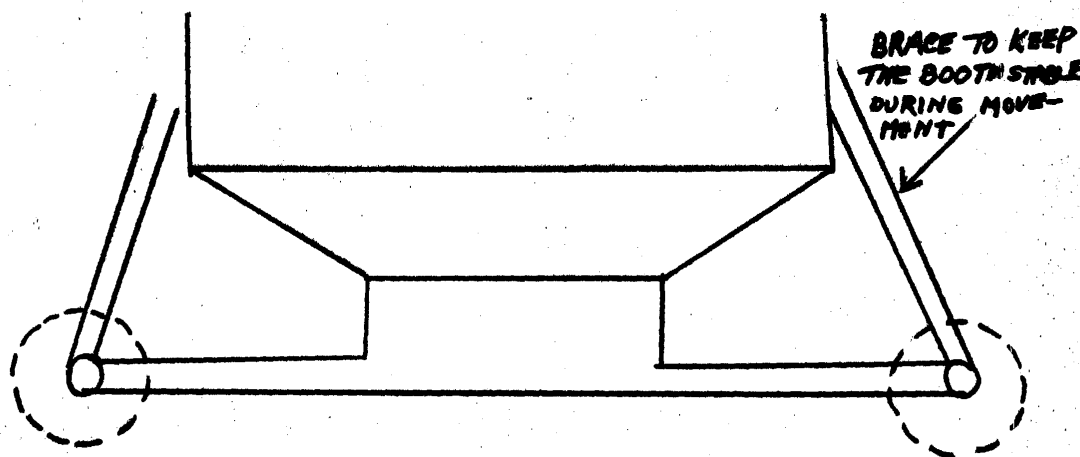
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Booth Braced for Travel
(See Para. 6 of text)

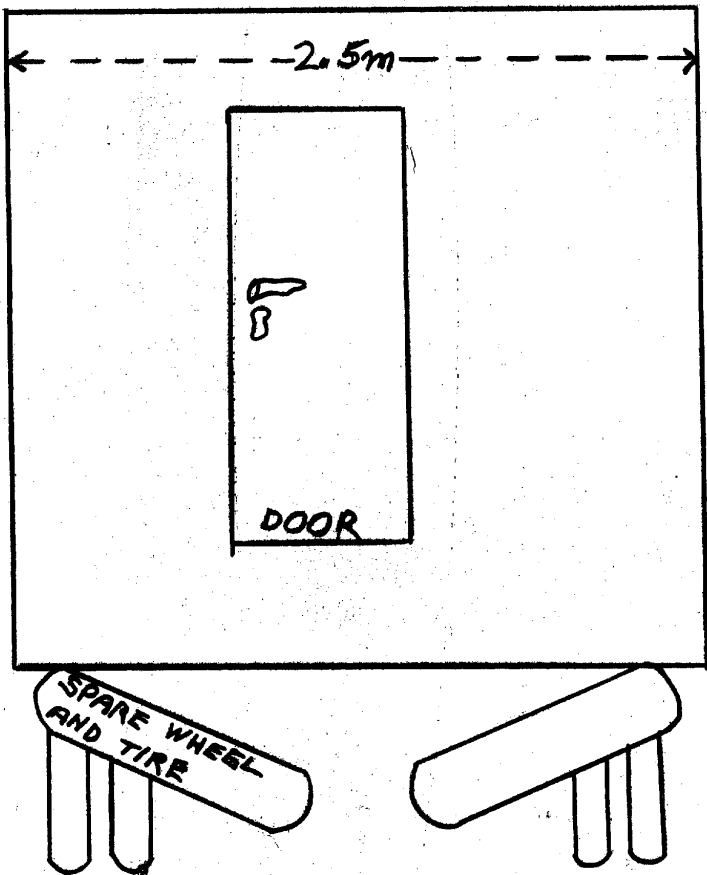


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Rear View of Booth on ZIS-151 Truck
(See Para. 6 of text)

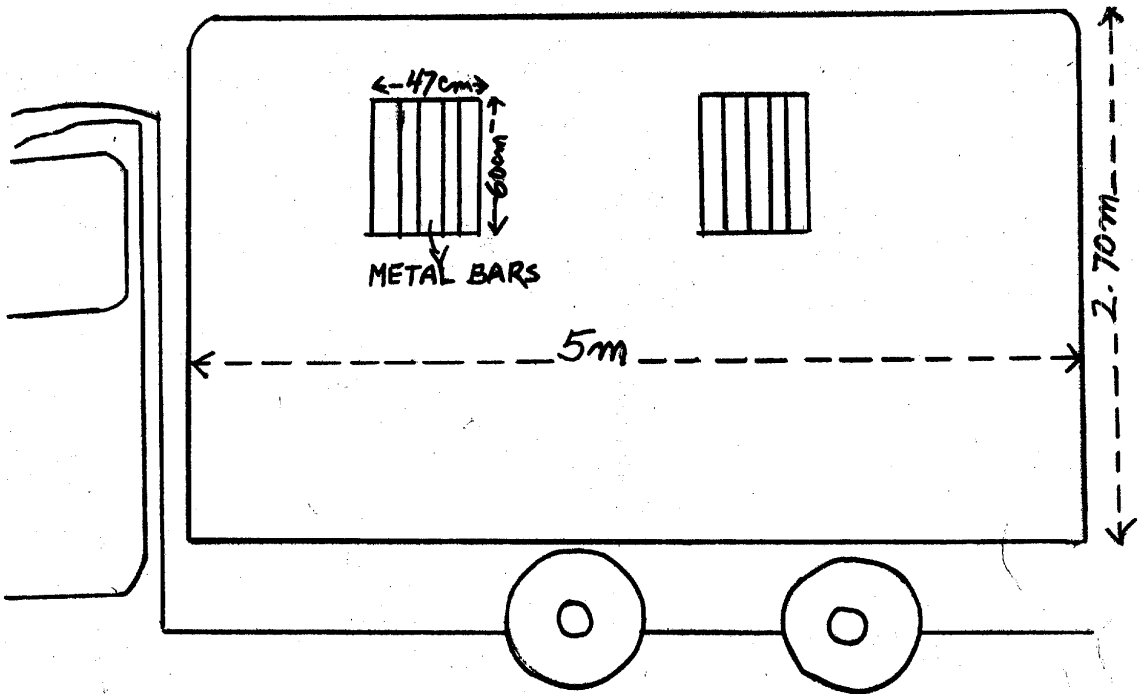


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Side View of Left Side of Vehicle
(right side identical?)
(See Para. 6 of text)

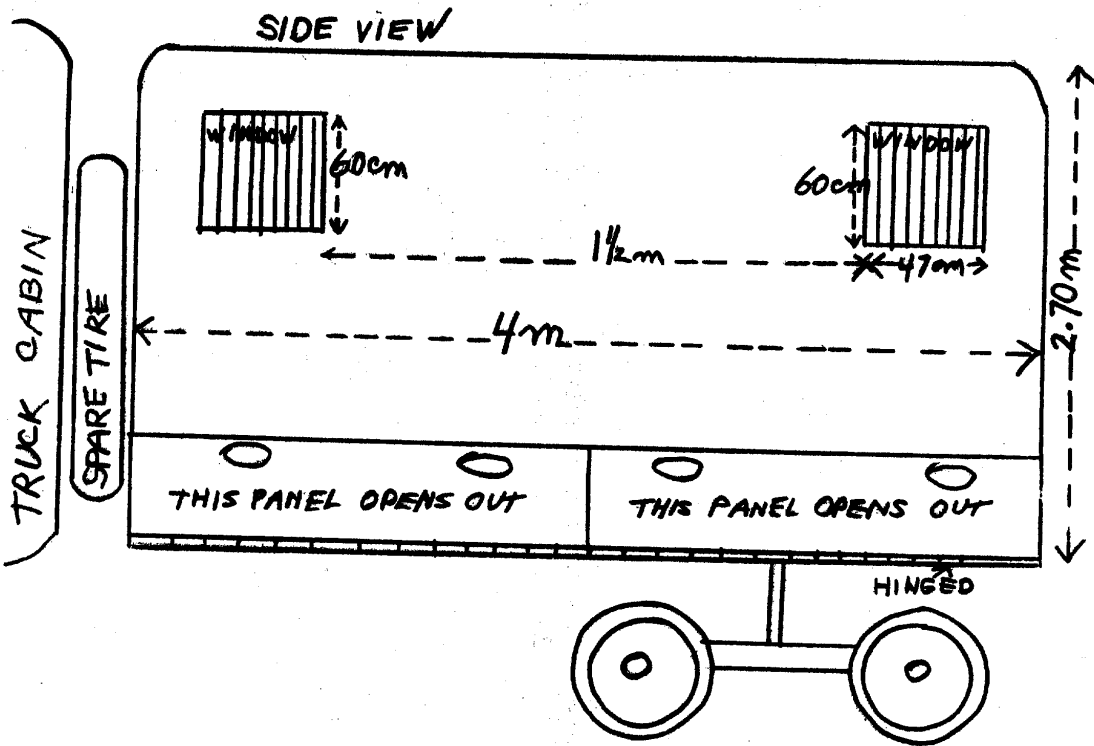


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ZIS-151 Truck with Large Metal Booth
(See Para. 6 of text)



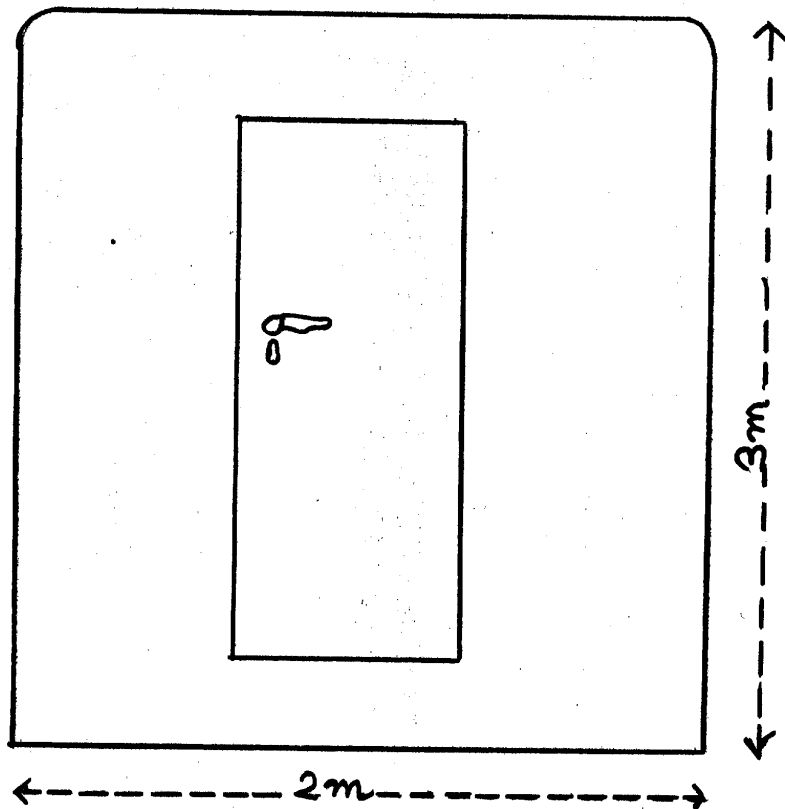
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Metallic Booth
(See Para. 6 of text)

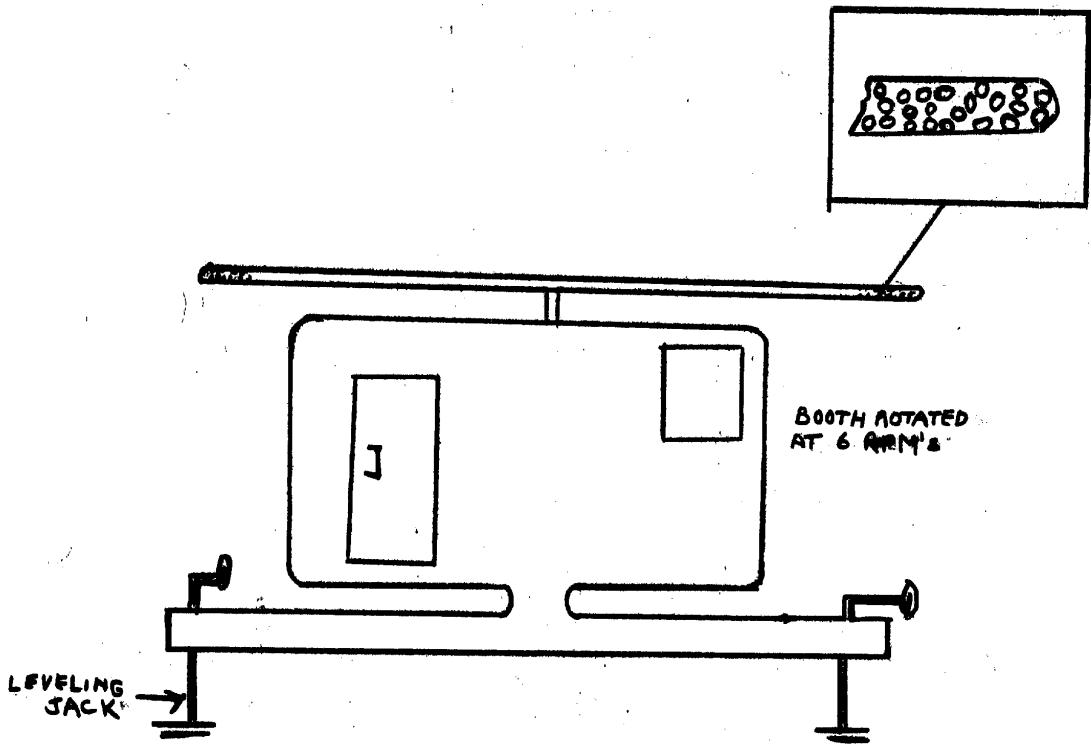


When door opens in the booth, the light in the booth goes out.

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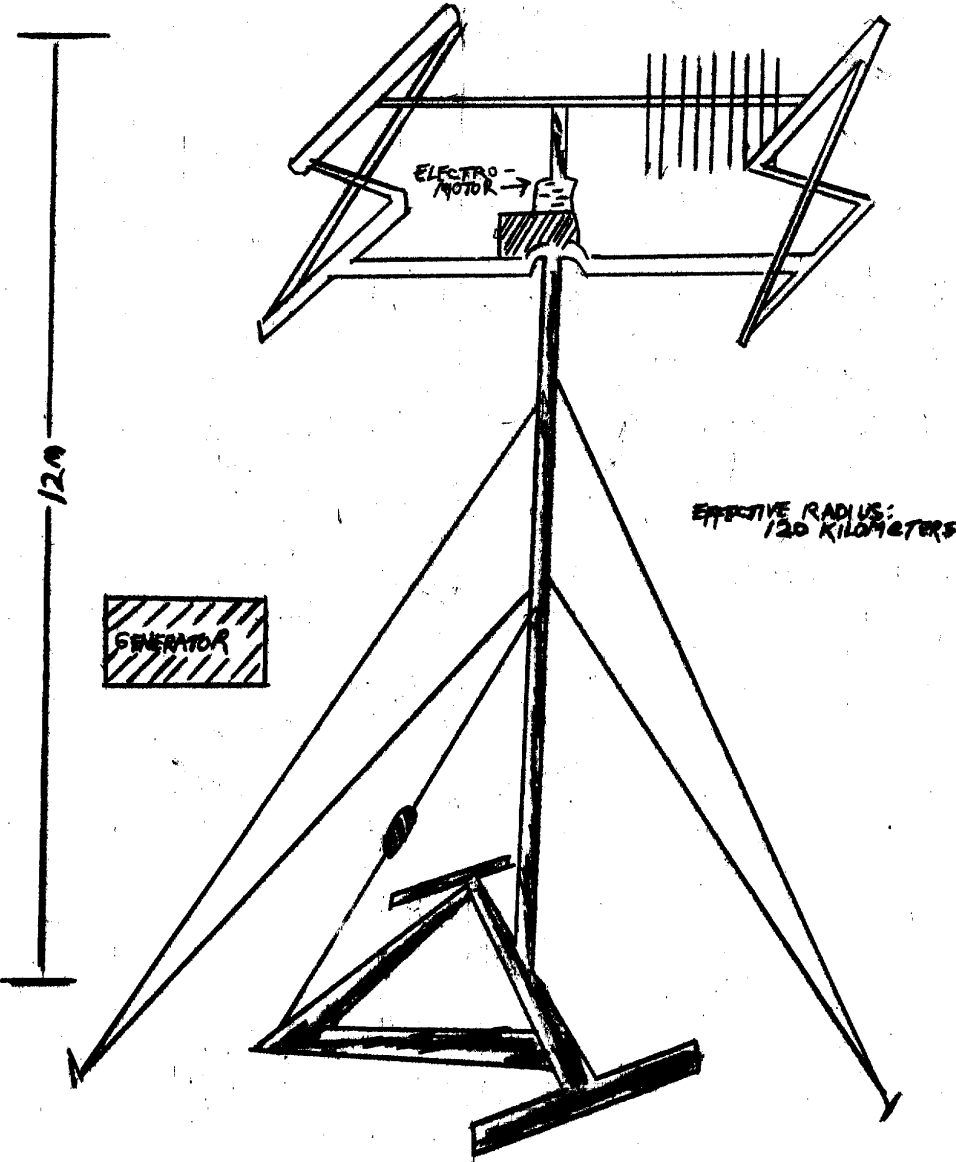
Pereskop (Token) Radar (See Para. 8 of text)
Effective Radius: 400 kilometers

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Memory Sketch of Knife-Rest Radar
at St. Poelten
(See paragraphs 9 and 11)

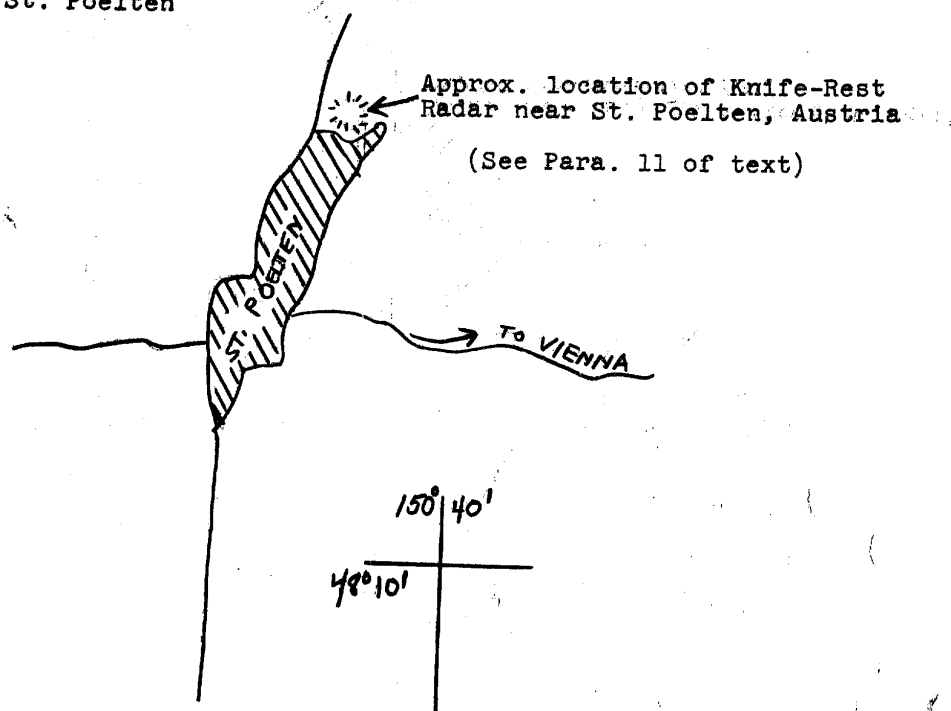


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Overlay on AMS-Series M-671
Sheet X-10, Wiener Neustadt
Pinpointing approximate location
of a knife-rest radar post
near St. Poelten



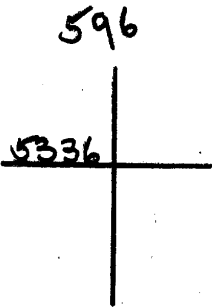
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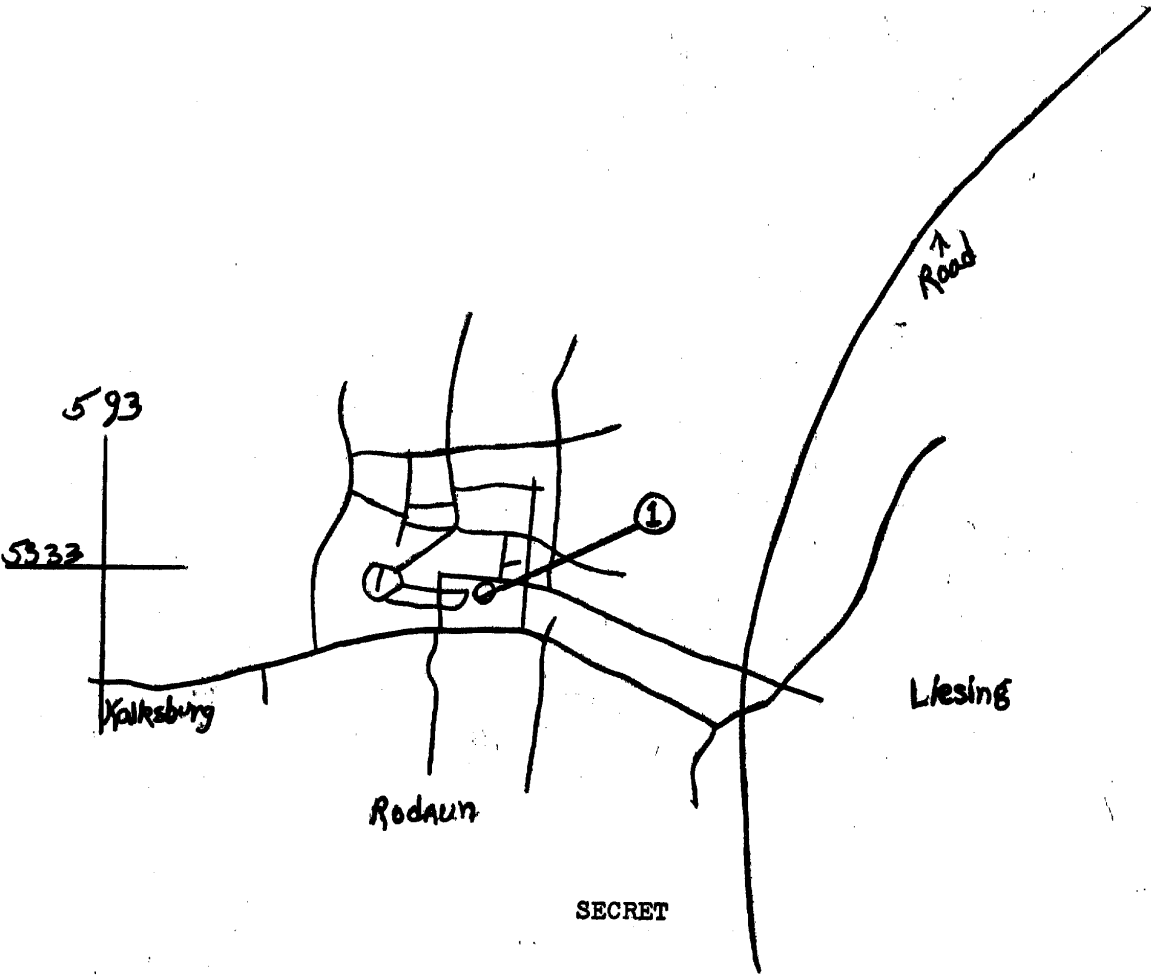
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Overlay of sheet X-10/4 NE, GSQS 4528,
Austria, 1:25,000, pinpoint location of
knife-rest radar (See Para. 18 of text)



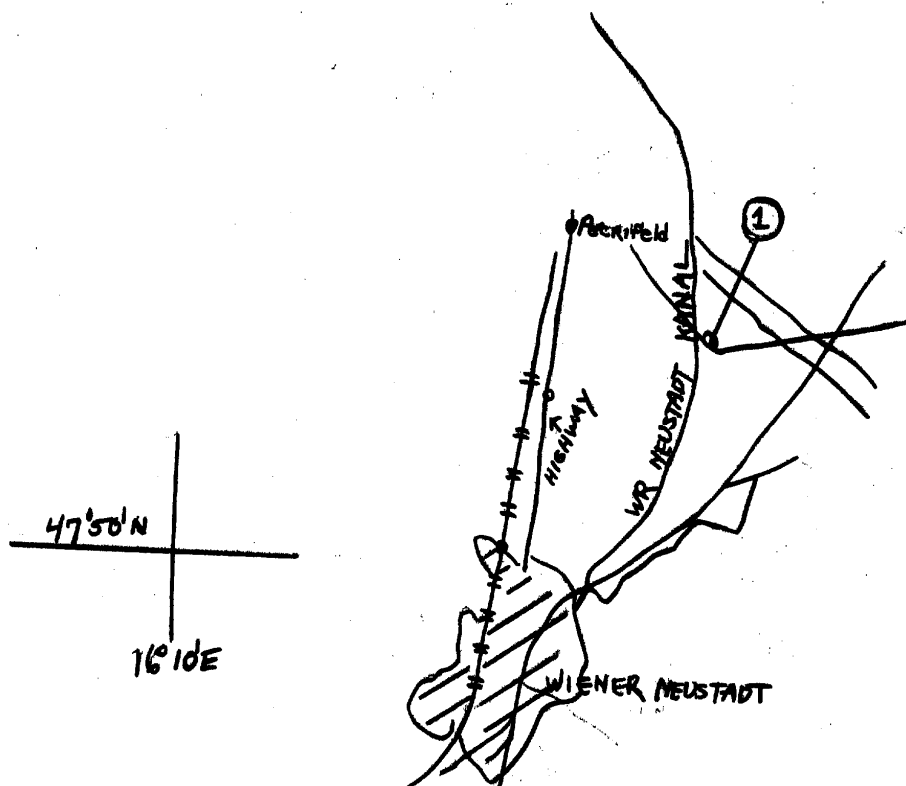
1. Location of knife-rest radar set



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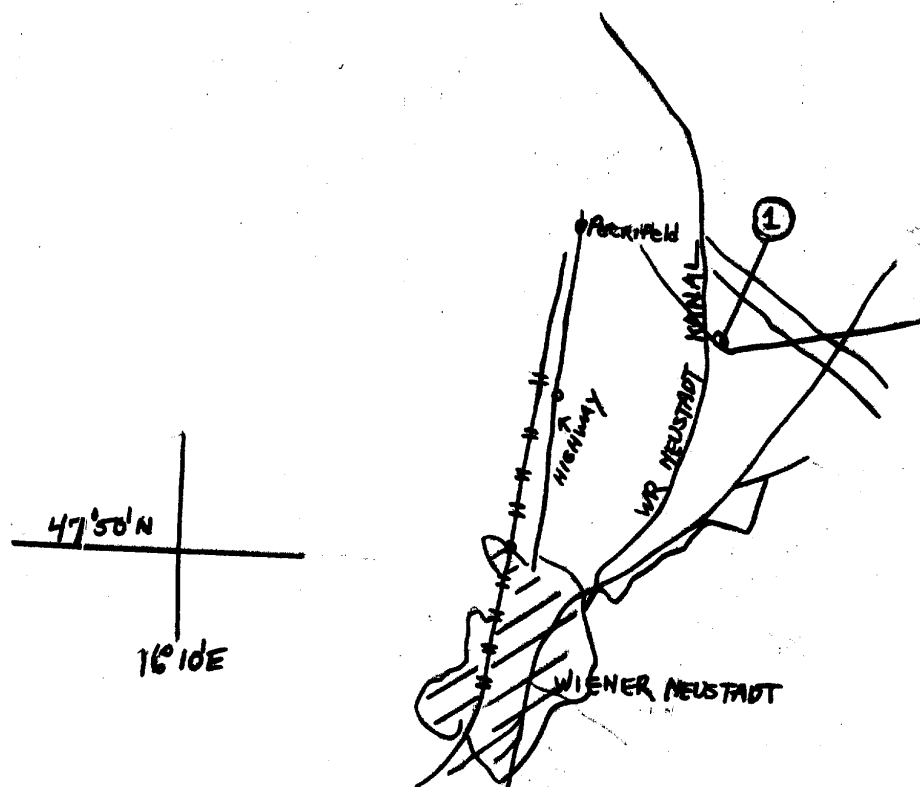
Overlay of sheet X-10, AMS-M671, GSGS 4416,
1:100,000, Austria. Pinpoint location of
knife-rest radar station near Wiener Neustadt
as shown on page 16. (See Para. 19 of text)



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Overlay of sheet X-10, AMS-M671, GSGS 4416,
1:100,000, Austria. Pinpoint location of
knife-rest radar station near Wiener Neustadt
as shown on page 16. (See Para. 19 of text)

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